

OU's overseas unit forced to make cuts

by Charlotte Berry

The Open University's overseas consultancy unit, the Centre for International Cooperation and Services, is being forced to cut its extensive programme of consultancy advice, workshops and information exchange.

The inevitable reduction in service follows the centre's failure to cover its costs since it was set up in April 1977 to expand the work of the successful OU Consultancy Services.

A three-year pump priming grant of £200,000 from the Ministry of Overseas Development was matched by the OU, who expected the Centre to become financially self-sufficient through income from fees and grants.

Unfortunately, according to the centre's deputy director, Mr Tony Koye, the aim to break even was based on assumptions that have not been borne out.

Contrary to expectations, four-week courses and workshops on the design of distance learning systems led on the OU campus at Milton Keynes have been seriously under-subscribed.

More practical skills urged by principal

by Patricia Santinelli

Higher education should move away from its present highly academic character towards more utilitarian purposes during the next decade in order to arrest our long economic decline, Mr R. Helmore, principal of Cambridgeshire College of Arts and Technology, said this week.

Speaking at the North of England conference in Durham on education and training in 1980, he said he hoped education would be the first to undertake practical measures, however painful, to arrest our long decline.

"At a time of shrinking resources we shall have to recognize that primary and secondary education need to be safeguarded, because from that all else flows." This will mean sharing resources in areas of acute shortages such as mathematics and other science subjects.

Further, said higher education it would concentrate all our efforts towards developing skills essential to the economy and to training minds to be adaptable and flexible to meet the challenge of the next 10 years.

He advised the education service to examine closely the way in which the manpower services commission operated. "If education became a more judicious mixture of broad control planning and locally responsive provision it might look as if the MSC that the two would merge imperceptibly without any pain, and the great joint department of education and training that so many hoped for would be achieved."

Discussing the problems of staffing in further and higher education, Mr Helmore said that it was difficult not to despair about the possibility of introducing a new and more flexible system.

At the moment teachers' unions are protesting more strongly for initial pedagogical training for all entrants to further and higher education," he said.

Earlier Sir Norman Christensen, Master of Magdalen College, Cambridge, had attacked universities for their lack of frankness in publishing information on entry standards.

Scholarly plea to save old library site

Further urgent pleas to the Government to reconsider the siting of the new British Library at Boston have come from a group of leading scholars and writers headed by Professor Hugh Thomas, director of the Centre for Policy Studies, this week.

Only last month the group sent Mr St. John-Stevens, Chancellor of the Duchy of Lancaster, a 40-page document arguing that the new building would become redundant by the year 2000 and would cost around £200m instead of the projected £164m. The group was particularly opposed to any move of the BL's reference division from the British Museum.

Now the group is even more anxious after the discovery that the Department of Environment intends to sell part of the Bloomsbury site originally earmarked for expansion of the BL's reference division to the British Museum.

This includes houses in Bloomsbury Square, Bloomsbury Way, Great Russell, Little Russell and Museum streets and Gaylen Place which are to be put up for auction in late January or early February for an estimated minimum of £6.5m.

The group believes that this is sufficient confirmation that the Government has no intention of recovering the siting of the new BL and will shortly announce that the second stage of building for the library at Somers Town is to go ahead.

Approval for the new building was granted in 1978 in the face of the library's urgent economic problems. The BL's collections are currently housed in 17 buildings throughout London and the number of books is expected to rise from the present 10 million to around 25 million by the year 2000.

The new library would house two reference and science libraries, bibliographic services and the library of the Library Association. It would also provide a cultural and exhibition centre.

In its document the group had stressed that the reference division should remain in the British Museum with the use of the King's Library. It did accept, however, that there might be a case for establishing a new Science Reference Library and for moving the newspaper library from Colindale to the new site.

Advisory council's future at risk

by Peter David

The future of one of Britain's 10 Regional Advisory Councils—local government bodies responsible for co-ordinating courses in polytechnics and colleges—is in doubt following a threatened 50 per cent cut in its budget next year.

The council concerned is the Regional Advisory Council for the East Midlands. With staff of 10 and an annual budget of £75,000, it oversees courses provided at Trent Polytechnic and Leicester Polytechnic, as well as many smaller East Midlands colleges.

Mr Roy Ainscough, the council's secretary, said this week that the threat to halve this budget of the organization had come from a committee representing the five county councils which contribute to the budget: Derbyshire, Nottingham, Lincolnshire, Northamptonshire and Leicestershire.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

In a letter to the RAC the committee said it did not want the council to continue "as an independent organization" and was recommending to its local education authority paymasters that its budget should be cut in half as part of the economy in public spending.

But Mr Ainscough said a cut of 50 per cent would mean staff redundancies and was bound to impair the work of the council. He pointed out that the joint committee which had recommended the cut consisted of local authority chief executives and members of policy committees, without representatives of education officers or members of education committees.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

tonshire and Leicestershire.

In a letter to the RAC the committee said it did not want the council to continue "as an independent organization" and was recommending to its local education authority paymasters that its budget should be cut in half as part of the economy in public spending.

But Mr Ainscough said a cut of 50 per cent would mean staff redundancies and was bound to impair the work of the council. He pointed out that the joint committee which had recommended the cut consisted of local authority chief executives and members of policy committees, without representatives of education officers or members of education committees.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

tion from the chief executive.

A spokesman for the committee, Mr Neil Ashcroft, chief executive of Derbyshire County Council, said the committee may recommend a reorganisation in light of the fact that they had received from the county council a letter stating that savings were made by jointly regional organizations.

Meanwhile, the East Midlands dispute may take a new dimension if it is discussed by the Council of Local Education Authorities this month. CLLEA debate the creation of a machinery to co-ordinate regional and financial in the public following the creation of the Government's Oakes Report.

A spokesman for CLLEA said that the RACs could be an important part to play in the system.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

The education committees of the five counties had already given their approval to the budget for 1980-81, he said. They were meeting today to decide whether to change their decision in view of the recommendations from the RAC.

January 11, 1980 No 377

Four colleges to become polys?

by John O'Leary

Polytechnic directors want the Government to designate four colleges of higher education as polytechnics as part of a rationalization of the public sector of higher education.

The four colleges chosen from an original list of six are Enlisc, Derby Lonsdale, Hull, and Southampton. The directors of all four said this week that they considered their colleges polytechnics in nature and would welcome a change of status.

A formal approach was made by the Committee of Directors of Polytechnics to Mrs Shirley Williams, when she was Secretary of State for Education, urging that the creation of more polytechnics should be considered, but this was refused. Now the CDP is vying to gauge the effect of cuts in education budgets before deciding whether to approach Mr Mark Carlisle.

Mr David Bethel, chairman of the CDP, said the committee would now want the designation of further polytechnics to come as a result of a rationalization policy.

"It is CDP policy that if government wishes to provide a planned higher education system, we believe that the statements in the original White Paper on polytechnics will hold good and more could be designated," he said.

Many directors foresee a contraction in the number of colleges and institutes of higher education in the next few years, and would favour an enlarged body of polytechnics providing the bulk of public sector provision outside teacher training. Some would like to see a federal system incorporating the remaining colleges under the leadership of local polytechnics.

The four colleges presently favoured by the CDP would be at the lower end of the polytechnic scale in terms of size but already offer a broad range of established advanced courses. They range from Hull's 3,000 full-time and sandwich course students to Derby's 1,850 and each has an extensive programme of part-time courses.

As well as satisfying the criterion of academic diversity the colleges were also considered to

supplement the existing polytechnic network in geographical terms.

The Department of Education and Science said this week it was unlikely in the current financial climate that more polytechnics would be designated, although there has been no ministerial statement on the subject.

The designation of this four would be a severe blow to the college principals' group, the Standing Conference, which has been making strenuous efforts to establish itself as an influential body on policy questions. Three of the four college directors are members of the committee of the Standing Conference and Mr Neil Merritt, of Enlisc, is chairman elect.

Mr Merritt said: "The Standing Conference has always believed that there should be a unified voice for public sector higher education and if the list of polytechnics were to be enlarged, it would unquestionably accelerate its efforts to promote a single body representing the management of the sector. As far as Enlisc is concerned, I would certainly welcome the conferment of polytechnic status."

University talks plot future plans

by Ngalo Crequer

Next week the University Grants Committee will begin an intensive series of interviews with vice-chancellors which will plot the course of universities for at least the next four years.

The exercise, the first of its kind ever undertaken by the UGC, is an indication of the seriousness with which it views the financial position in which the universities have been placed. Usually they are content to make five-yearly statements to each institution but now they plan a review of each university in the next few months.

The committee will call up four universities each week. The format will be the same for each, with a series of interviews with vice-chancellors, deans of schools, and heads of departments. The committee will also meet with the university's financial and administrative officers to discuss the financial position of the university, their proposed student numbers, and how this is to be achieved.

The basis of the discussions will be the universities' five-yearly statements. The committee is to receive a letter from the UGC in October on their reaction to the three-yearly financial projections, a two per cent growth, level funding or a reduction in income of five per cent for the next four years.

Tenability of the universities' interviews will end up in special pleading exercises by some of the universities. A number have already refused to give the UGC figures about the effect of their financial projections because they say such a thing would be "highly undesirable". Many are forecasting reductions and Lord Armitage and Lord Flowers, at London, have both raised the spectre of closures.

The universities do not yet know the effect on their income of the new proposal to charge overseas students the full cost of their tuition.

At the end of the series of interviews the UGC will ask the universities to make a detailed breakdown of student numbers by subject area. They will want to know the effect of some student numbers of the three financial projections.



They want details of self-financing courses and the proportion of student lost between subject groups. They also want to be told about the effect on staff losses of a freeze on vacancies, where relevant, whether any departments would have to close and what will happen to staff numbers of the three financial projections.

The universities will not have been reassured by a speech made this week by Mr Mark Carlisle, Secretary of State for Education and Science, when he said that some of the complaints from them about the overseas students policy had been "unfoundedly small". But he said "there may be special circumstances of difficulty, but we must wait and see where they are."

Buckingham facing grave financial problems

by Sandra Hempel

Britain's first "university" university is facing serious financial difficulties. The University College of Buckingham, which opened in 1976, has been a constant source of worry to its founders. It is now believed to be in a financial state of collapse.

An appeal has been launched for £2m which is described as a "plea for help" to avert a crisis. The college's financial problems have been made public in a letter to the press.

There was no deadline for donations, but the sooner the better, he said. The situation was serious. Buckingham's newly appointed principal, Professor Alan Peacock, said: "We are competing in a market where our competitors get their capital from public and private sources. We have no such resources. We are in a desperate financial position. We are in a desperate financial position. We are in a desperate financial position."

Lord Armitage, one of the founders of Buckingham, said despite the financial problems the college was by no means doomed.

Contents

British Library



ST PANCRAS OR BRITISH MUSEUM

Patricia Santinelli reports on the reopening of the debate about the future of the British Library, 8

Academic melancholy E. G. Edwards argues that the best antidote to cuts-induced melancholy is to open higher education's doors wider, 9

Biology journals Steven Rose finds the boom in biology journals still insufficient to meet demand for publication, 11

Habsburg survival Hamish Scott reflects on the stubborn survival of the Habsburgs in a review of six new books on the dynasty, 14

Monolingual America Steven Muller argues that the "monolingual isolationism" of America is shameful and damaging, 27

Sabbatical leave Ngalo Crequer reports on a new league table of sabbatical entitlement in universities, 8

North American news	5
Overseas news	6
Books	14-18
Noticeboard	19
Classified Index	20
Letters	26

The first victims of the decision to freeze pay agreements were the academics.

According to existing agreements, all employees of a university, including academics, and the members of their family are exempt from tuition fees. In answer to a question on the subject, the Minister of Education and Culture said that the freeze in the salaries in the year 1978 was

Continued on page 10

continued from page 9

Country	A	B
Great Britain	66	62
France	79	71
Italy	89	81
West Germany	85	77
Little Europe	74	69
United States	60	57

The author is a former vice-chancellor of the University of Bradford.

Two views of D. H. Lawrence. Left, a 1912 photograph, and right, a portrait drawn by Ed Kapp 11 years later.

A facsimile of the manuscript has been published by the University of California Press. Carl Hiaasen is *Doing Some Hot Lovers* for the new edition of *Lawrence Sanders* Press edition of *Lawrence Sanders* Press edition, and will shortly have to make the decision whether to restore cuts to the body of the text, or to print an appendix, or to have them put into several articles on the edition in the new volume. There is, however, a

through summary, up, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 8

acknowledgments — references — like the parts to "early planktons, doesn't stop people from writing like this because it's how they're trained to do it. Indeed, to vary from the style would probably inhibit acceptance for publication."

Many years ago I saw the distinguished biologist, Peter Madawar, wrote a beautiful essay entitled "Is the Scientific Paper a Rhetor?" which concluded that indeed it was that scientific exposition. Just what I had done that year. I was not at all sure that, very despite the service paid to this reality, and indeed that the great honesty about one's research and the way in which people describe it, can

Exploration of the range is made possible by the Science Citation Indexes, a sort of monodirectory which has grown up around the idea of publishing the names of those papers which cite any other particular paper in a given year. It is a purely statistical exercise which is a natural adjunct to the references those prior papers which are so important to the development of their own work, and hence that one can build up a "network" of research field by studying these citations.

Of course, an author, on looking at one's own entry in the

The scientific journals the majority of the cited papers within this bio-
It is interesting to
is the explosion
over the past
physiological number
purely biological
in in the small num-
journals, biological
time to dominate.
use why so many dif-
Of course, learned
wish to publish their
my little country has
publishes one or

... to the primary journals on science more.

In the whole field of scientific journal publishing, not much effort has been distinctively more than that. There are exceptions here in two of the oldest and the scientific journals and one or two of the of the newest.

Each offers a mixture of rapid communication letters—in recent years largely dominated by biology—plus articles, book reviews, comments or current internal developments.

... continued on page 1

Year	N (000)	Class 1 N	Class 2 N	Class 3 N	Class 4 N
1967	55.0	16.8	7.5	13.7	17.0
1968	58.1	16.3	8.1	15.8	17.9
1969	60.3	18.7	8.0	16.3	18.3
1970	62.5	18.8	8.5	17.5	19.7
1971	63.6	19.1	8.9	18.4	20.2
1972	66.0	20.8	9.3	19.6	21.3
1973	66.6	22.3	9.8	21.1	23.4
1974	68.0	23.5	10.4	22.1	24.1
1975	70.1	25.6	11.7	23.2	25.6
1976	74.8	26.2	12.0	24.0	26.6
1977	77.8	28.0	12.1	25.7	27.0
1978	80.8	29.9	13.4	26.9	28.6

[illegible]

are generally self-divided as they are into the "formal" sections—abstract—introduction—materials and methods—results—discussion—conclusions—references—like the parts to "early planning," doesn't suit people writing like that because if they're "planned" to do it, indeed, any part of the style would probably inhibit acceptance for publication.

Many years ago now the distinguished biologist, Peter Medawar, wrote a beautiful essay entitled "Is the Scientific Paper a Fraud?" which concluded that indeed it was, that scientific experimentation just was not something that, despite the lip-service that is paid to it, and indeed the rather obvious fact about one's research that happens when people describe it, ever can

reference and editor of the journal, perhaps one or two others. Of course, this overage conceals a vast range.

Exploration of the range is made possible by the Scionica Citation Indexes, a sort of monodirectory which has grown up around a place of publication named the Scionica, which cites any other particular paper in a given year. There is a naïvely positivist myth which claims that outliers cite as references those prior papers which are important to the development of their own work, and hence that one can build up a "network" of a research field by studying these citations.

But, as an author, anxiously not one's popularity by looking at one's own entry in the

lished of the cited journal which publication impact of a decade of a overwhelming literature as note that, a biological research decades, a decade of these are mainly biological journals. Of generalists to the fact that is associated with own special developed as academy, and

hundred or so, most of these, therefore, in addition has the greatest influence on the scientific journals—the majority of the cited papers within this literature is the explosion of papers over the past 30 years, particularly in the purely biological—technically oriented—in the small number of journals, biological journals, to dominate the scene. Why so many different, of course, because of course, because of the journals and every scientific country has its own journals, one or two, published on the new journals, the pressure on libraries to purchase them becomes well-nigh overwhelming. It is papers important to the development of one's research or not to be lost in the welter of literature.

All this makes the task of librarianship even more so much to give personally. I would like to present it as journal publishing were restricted to the national and international learned societies, and that the recognized major journal in any field were published more frequently. Broth Research, perhaps the major international nonbiological journal, used to appear monthly, and it is now published only twice a week. It could be highly in my view, for it to appear daily and the other competing titles were to vanish. At least then there would be a few more titles, but they were not accepted as formal literature, priority claims and referencing were not permitted, and in the competitive environment of US science, this meant back to the primary journals once more.

In the whole field of scientific journal publishing, not much offers distinctively more than this. The exceptions lie in two of the oldest and the scientific journals and one or two of the newest.

Each offers a mixture of rapid communication letters—in a recent years largely dominated by biology—a limited number of major articles, of new ground-breaking reviews, articles; book reviews; comments or current internal developments.

continued on page 11

interesting blueprint for any future expansion on a collegiate basis, since, like the call of a living organism, the work base units cannot be multiplied without losing any of their qualities. Perhaps the greatest attraction of the system is that it can develop through very minor adaptations of existing conditions, and needs only good will, understanding and acceptance of new roles to make it work successfully.

BOOKS

Methodists

Methodist Successions: the origins of Free Methodism in three Lancashire towns
by D. A. GOWLAND
Manchester University Press, £10.00
ISBN 0 7190 1335 6

This book takes its place with a rich decade for Methodist historiography. Students would be well advised to come to it after a judicious dose of W. R. Ward's *Religion and Society in England 1790-1850* and the same author's editions of Jabez Bunting's *Correspondence*; but Gowland goes more than just the finishing touches to Ward's books.

His book is about the tensions in the second quarter of the nineteenth century which produced the Wesleyan Methodist Association and the Wesleyan Reformers. In 1857 most Associationists and Reformers fused into the United Methodist Free Churches, to form the third largest English Methodist denomination.

The book's general concern is thus with the process by which Methodism's last institutional disruption became Methodism's first important unifying factor. A secondary concern is the extent to which the seceders preserved the Wesleyan dynamic of sustained mission to harness with ordered government. That dynamic was necessary for their survival from its union of faith with order must come their churchmanship.

Gowland's particular application of these general concerns results in useful social history and shrewd political history leavened by a certain personal involvement; for Gowland's father is the President of the Methodist Conference, and his ancestry is Free Methodist.

There is nothing random about his choice of towns. Manchester, Rochdale and Liverpool were important places for Free Methodists: Associationists and Reformers first informally united at Liverpool in 1853; the Associationists formally agreed on union at Manchester in 1855, and the union was consummated at Rochdale in 1857. But the seceders in these towns had very little in common: no stereotype go-ahead young democrats striking at Jobab Bunting's "popery" with serve, hot-heads though some of the seceders were.

Liverpool, for example, was a town whose Wesleyanism had reached its ceiling, and whose Methodist rebels (other than the future Sir James Picot, whom Gowland finds unappealing) were proletarians at pliant odds with their surrounding working-class culture. In Manchester by contrast, the Wesleyan Associationists were moving out in rapid waves to ever grander suburban chapels, leaving behind conservative little islands of Methodist respectability, neat bourgeois and shabby-genteel, rather different odds with their surroundings. These were Manchester's rebels. And in Rochdale were the grandees of Beilila Street, one of the great northern chapels. These were their towns: rebels, people who with where might be Congregationalists, true Manchester Schoolmen who had created Rochdale in their own image and were now running their rebel chapel on advanced business lines in a parody of independent churchmanship. Here alone did the seceders offer a radical critique of Wesleyan organization. Here indeed was a Christianity, bracingly relevant for the new age.

But if Rochdale produced church order of a sort, none of them discovered religion at its birth point. Gowland's strategy is to provide a vision for despite its sensitive and dispassionate analysis, it lacks a necessary postscript.

Free Methodism survived, even in Liverpool. Certainly it faced a future of relative numerical decline in common with the rest of Nonconformity; but there is evidence that it did in fact achieve that vital marriage of faith and order so absent or feeble in formation. The next round of Methodist union to follow the Free Methodist came in 1907. In this year no official list of their church's placed Chas. and Charley, which suggests an unusually integrated sense of mission and Methodist churchmanship of a high order.

The Fate of the Anglican Clergy
by Robert Towler and A. P. M. COXON
Macmillan, £15.00
ISBN 0 333 25632 8

The fate of the Anglican clergy in an increasingly secular society is a topic of considerable interest. How have the clergy adapted to the declining demand for their services? Do they see themselves as possessing a new role? What effect has this decline had on recruitment and training?

Sociologists have often included the clergy under the rubric of the professions, but Towler and Coxon argue that the ministry is a social status akin to that of a professional. Clearly, there is an ideal of service, but Towler and Coxon question whether the clergy possess any abstract body of specialized theoretical knowledge on which to base their professional status. Theology, they point out, has only recently become a necessary part of clerical training. They claim that it does not form the basis for advice and guidance, but is merely a secondary concern in the preaching, and that it plays no different role in the lives of the clergy than in those of their parishioners.

Whatever the truth of these claims, many sociologists would argue that seeking to identify a set of necessary and sufficient conditions for professional status is an exercise in interest only to occupational groups wishing to improve their public standing.

An occupation is merely that form of work for which an income is received, and professions are those occupations according to which they are believed to rest on an esoteric body of knowledge or learning on the basis of which advice or some skills believed to be scarce are tendered. Clergymen make a living from their work and have been believed to possess a specialist abstract knowledge or learning which informs that work. The fact that some of their congregations may now know as much theology as their ministers and that their advice and assistance are now less sought after might be thought

The search for a new mission

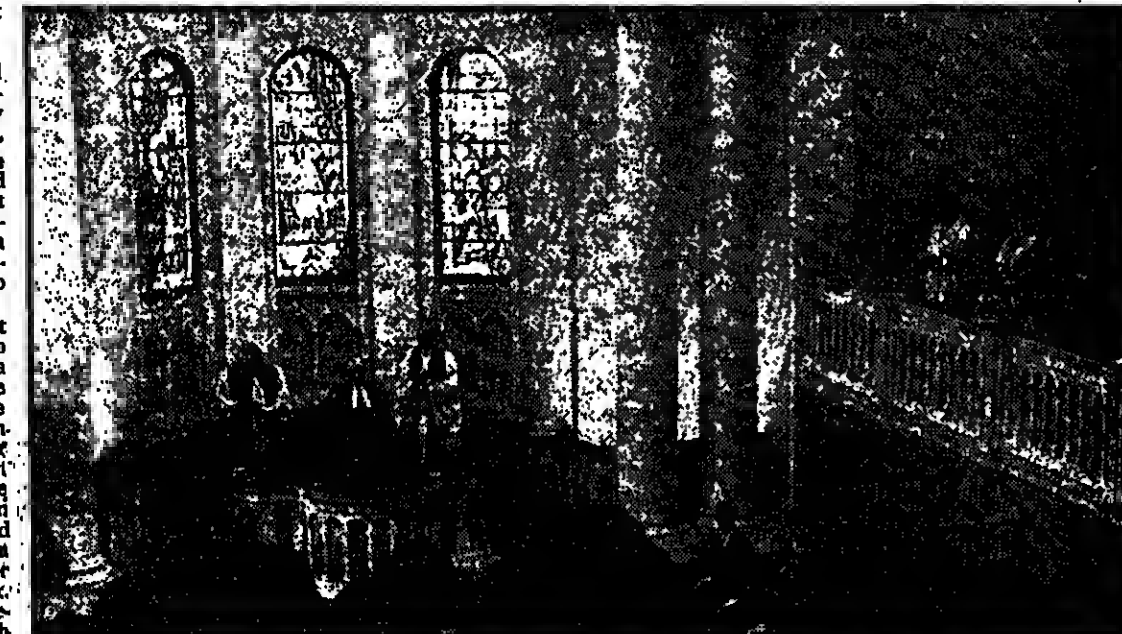
simply to show that this is a profession in decline (like perhaps astrologers in the seventeenth century) rather than that it was never a profession.

For in an important sense what is or is not a profession depends on how it is viewed by a clientele rather than how it is viewed by sociologists. There is no specific list of attributes that can provide an authoritative basis for decision on the matter. Clergymen have highest been treated as professional people, but a declining clientele has made many anxious about what they should be doing, while education has closed the cultural gap which encouraged the belief that the clergy possessed some unique body of relevant abstract knowledge.

These factors have threatened the professional standing of the clergy and, as Towler and Coxon argue, the two main responses have taken very different directions. As the church becomes more marginal to society, the clergy can either adopt a conservative response, retreating with the faithful few into a sequestered and increasingly sectarian

enclave, or they can, more radically, embrace the decline of the church as an opportunity to escape increasing isolation and thus to minister in the world. The conservative response leads, as this book suggests, to an increasing concern with securing recognized professional status and skills, through more extended education and training in the practical requirements for developing and retaining an active congregation. The radical response leads to a growing reluctance to work to a parish among narrow and conservative believers, with its ultimate logic being the disappearance of the ministry as a separate category and source of income altogether in order to maximize the opportunities for contact with the community at large.

I suspect it is here that we can find the reason Towler and Coxon state so forcefully the notion of the clergy as a profession. Their sympathies clearly lie with the radicals who wish to break out of the exclusiveness of a defensive and declining church to find a new mission in the world, and if the clergy are not a profession, or even an



Archbishop Ramsey at a Methodist service: the clergy can either retreat into a sectarian enclave, or "embrace the decline of the church as an opportunity to escape increasing isolation and thus to minister in the world."

Benefits of the clergy

The English Clergy: the emergence and consolidation of a profession 1558-1642
by Rosemary O'Day
Delcorte University Press, £12.00
ISBN 0 7185 1167 0

Dr Rosemary O'Day has produced a very scholarly study based on her PhD thesis. She has a great deal to say about the life and work of the clergy, but her main concern is with the clergy considered as a professional body.

She argues that it was between 1558 and 1642 that they first took on the characteristics of a profession, including "institutionalized training, an accepted internal hierarchy, rules, regulations and codes of conduct, and similar interests, emblems and life-styles". She examines recruitment, training, order, structure, patronage, law, and the role of the clergy, relations between clergy and laymen, and the growth of professionalization. Though she draws on a number of recent studies, she has brought many things to say.

One thing occurring in this period was that the clergy came to be recruited almost exclusively from university graduates. One explanation for this is that the increased prestige and influence of a patronage system in the more attractive than it had been before, but Dr O'Day does not fully explain why so many graduates wanted to go into the church at a time when a great number of the country's 3,800 vicars were remaining nonconformable in real terms being more attracted than ever.

There is a very interesting discussion of the influence of patronage on the quality of the clergy. Dr O'Day suggests that the importance of patronage was particularly

system of patronage was one of the main reasons why the new profession failed to match up to the Protestant ideal. She shows how extensive was the patronage exercised by the crown through the Lord Keeper, but she does not explain satisfactorily why Elizabeth I and the early Stuarts did not use their power more effectively to build up a really strong body of supporters.

Dr O'Day may underestimate the professionalism of the medieval clerical society. In chapter 10 she endeavours to put this doubt to rest, but she is not entirely convincing. The medieval clergy possibly did not meet the requirements of modern definitions of a profession, but they were a close approximation, with their own laws, discipline, and their great powers over the laity with whom they were not integrated by marriage. The anti-clericalism of the Middle Ages was a product of clerical professional privileges. It could be argued that what happened between 1558 and 1642 was not the emergence of a profession but radical changes in an existing one.

Dr O'Day points out the difference between "a mediating priesthood" and "a pastoral ministry" but she might have explored further what difference this made to men's attitudes. It is possible that a priest who could change laws and wine into the body and blood of Christ and who could forgive, or not forgive, sin in Christ's name might find it more difficult to respect the laity than a minister who could only counsel and baptize.

At times the book is hard to read because too much detail has been packed into the text, but it is a very interesting contribution to the study of an important and unduly neglected subject.

Dr O'Day's book is a valuable contribution to the study of the English clergy and its role in society.

The Norman take-over

The English Church 1066-1154
by Frank Barlow
Longman, £15.00
ISBN 0 582 50236 5

Already widely acclaimed, this book represents Barlow's mature interpretation of the changes which affected the English church under Norman rule. His principal thesis is clear. Developments taking place in Europe were likely to happen in England, with or without the change of dynasty. But, with the arrival of the Normans, the English church was now under new management.

In terms of the industrial analogy, it was a take-over bid which saw a complete change of personnel in the higher echelons of the English church. Subordination of the English church to Rome, in any technical sense, was never likely for Canterbury outside the Norman city, as a centre of Christianity in the north-west. The Anglo-Norman church exerted a powerful influence on the Celtic churches of Ireland, which, curiously, established a stronger sense of identity than the Normans allowed the English church.

The success of Celtic churchmen in Ireland and elsewhere, however, is not what Barlow is concerned with. He is not concerned with the details of the history of the church, but with the changes which affected the English church under Norman rule. His principal thesis is clear. Developments taking place in Europe were likely to happen in England, with or without the change of dynasty. But, with the arrival of the Normans, the English church was now under new management.

Barlow's medieval scholarship is not only accurate but also very readable. He is not concerned with the details of the history of the church, but with the changes which affected the English church under Norman rule. His principal thesis is clear. Developments taking place in Europe were likely to happen in England, with or without the change of dynasty. But, with the arrival of the Normans, the English church was now under new management.

Barlow's medieval scholarship is not only accurate but also very readable. He is not concerned with the details of the history of the church, but with the changes which affected the English church under Norman rule. His principal thesis is clear. Developments taking place in Europe were likely to happen in England, with or without the change of dynasty. But, with the arrival of the Normans, the English church was now under new management.

Barlow's medieval scholarship is not only accurate but also very readable. He is not concerned with the details of the history of the church, but with the changes which affected the English church under Norman rule. His principal thesis is clear. Developments taking place in Europe were likely to happen in England, with or without the change of dynasty. But, with the arrival of the Normans, the English church was now under new management.

Barlow's medieval scholarship is not only accurate but also very readable. He is not concerned with the details of the history of the church, but with the changes which affected the English church under Norman rule. His principal thesis is clear. Developments taking place in Europe were likely to happen in England, with or without the change of dynasty. But, with the arrival of the Normans, the English church was now under new management.

Away from it all

Accessibility: the rural challenge
by Michael J. MOSELEY
Methuen, £8.00 and £3.95
ISBN 0 416 71220 7 and 71230 4

Here is a book which casts more light on the confused subject of rural deprivation than the whole welter of recent statements on the fashionable concern. Like all leaves which emerge to sudden public prominence even though the underlying problems are of long standing, rural deprivation has attracted the support of a range of divergent interests which previously had evaded little sympathy for the problems involved. It is very difficult to discern why this issue has emerged now and why it is being championed by such an unlikely alliance of politicians, senior civil servants and local authority interests.

The timing of the issue is closely associated with the coming to power of a Conservative government whose strongest political support is in the shire counties and which is committed to both clipping public expenditure and reforming the allocation of central finance to local authorities. These are the issues which are concerned to redress the balance of advantage which the previous government had given to the inner cities in the rate support grant. However, it is doubtful if any such redistribution will go on and programmes for the rural poor rather than helping rural counties maintain their cherished commitment to a low rate policy.

Hence the political battle lines have been drawn between the cities and the countryside—in effect, between the urban poor and the rural poor. Of course, this is a travesty: many of the causes and consequences of poverty are the same wherever; low pay, poor employment prospects, bad housing, inadequate services, and political impotence. If however deprivation in rural areas has distinct dimensions requiring separate policies, then

one of these must surely be problems of accessibility. This is where Dr Moseley comes on the scene. Significantly he sees accessibility as "the rural challenge".

Over the past 30 years, the gradual concentration of services and employment in country towns and the parallel decline of public transport have meant that many of these living communities face real difficulties in fulfilling even the routine of life—getting to school, to work, to shops and to clinics. Living in the countryside places a high premium on personal mobility: indeed the proportion of households owning cars is 10 to 20 per cent higher in rural areas than the national average. However, these high levels of mobility have helped undermine support for public transport and for localized village services, thereby exacerbating the plight of those without private transport.

The book details these trends and discusses their impact on different sectors of the rural population, singling out the problems of the elderly, children and teenagers, and housewives. The author is to be applauded for bringing attention to this major aspect of rural deprivation. He has drawn upon a mass of technical research and presents a clear and concise synthesis. Accessibility is shown to be both a sound, evaluative concept and a potentially useful tool in rural planning. Dr Moseley is rightly critical of present policies for being "merely focused, ill-coordinated and of doubtful significance". Accessibility as a policy objective is that it cuts across the traditional concerns of transport planners, land-use planners and social planners.

The unity and clarity of Dr Moseley's treatment present a significant challenge to each of these groups and to rural politicians. His book will also be read avidly by all those interested in contemporary social change in rural Britain.

Philip Lowe

Changes in geography

Geography and Geographers: Anglo-American geography since 1945
by R. J. JOHNSTON
Edward Arnold, £12.00 and £5.95
ISBN 0 7131 6232 2 and 6238 4

Most university departments of geography appoint one of their teachers to try to make the recent history of the subject accessible to students. It takes a teacher with energy and imagination to bring this material to life. This book is a book that will be of the greatest use to his less venturesome colleagues in other universities.

As Professor Johnston says, this is a book within a book. Five chapters deal with the history of the changing content of the American human geography, and so forth. As possible, the presentation is a detailed one. The reader will find a bibliography of well over 500 items, the principal contentions of each being briefly summarized. These summaries, illustrated by neatly chosen quotations, constitute a representation of the salient features of development, drawn from the printed word.

The approach works best where the book has been read, and so it does. There is now a fair amount of agreement about how the regional concept and regional approach dominated in geography until the 1940s, was replaced by a post-war concern to produce low-level statements about human locations as determined by space and distance. Towards stage the story line is a clear one, but also the significant certainties of a post-war era.

Not the least interesting and disquieting thought derived from this most stimulating book is that the halting development of some recent innovations in geographical thought may relate not to their lack of potential, but to the lack of new recruits to the geographical profession to develop them.

T. H. Elkins

BOOKS

Down but not out

Slums of Hope? Shanty towns of the Third World
by Peter LLOYD
Manchester University Press and Penguin, £5.95 and £1.25
ISBN 0 7190 0707 0 and 14 022145 X

Since the Second World War there has been a remarkable increase in urbanization in the developing countries of the tropics. Unfortunately it has been accompanied by the growth of shanty towns and slums alongside and around the often very impressive and affluent central areas of the cities, whether in Latin America, tropical Africa or many parts of Asia. And the problems of these shanty towns, in physical and social planning, community development, and the maintenance of law and order, seem well-nigh insuperable.

The literature on shanty towns is considerable but it is mostly concerned with housing problems and is written by and for planners. The difficulties of these settlements and their inhabitants need to be assessed in a wider social and economic context, and what must be appreciated is that this is not the picture of what life is like in a shanty town community as seen from the inside. For too long these settlements have been viewed solely in terms of social disorganization and apathy. Now scholars like Peter Lloyd are discussing the hopes and fears of the urban poor and revealing the existence of a

largely low-shedding population with considerable potential for self-improvement that calls for massive programmes of community development and self-help.

In this book the author, trained initially as a geographer, and for many years a professor of social anthropology, first in Nigeria at the University of Ibadan and now in the University of Sussex, has taken a new look at the shanty towns of the Third World and comes forward with an unusual and detached view of their problems and their prospects. This is based on both extensive reading and his first-hand experience of, and involvement in, the Yoruba towns of southern Nigeria and, more recently, of Lima in Peru. How, he asks, does the shanty-town dweller see his society? Are there indeed "slums of despair", peopled by the "downwardly mobile", and likely to remain the home of the drags of society and the shanty towns? Or, by contrast, are there really "slums of hope", where the people are the "upwardly mobile"—those who will eventually become integrated into the mass of the working population and who have come to the city as part of a conscious move for self-improvement.

To see the world through the eyes of one's subject, Professor Lloyd reminds us, is very much the task of the social anthropologist, and through this book we are given some of his insights and perception as well as much guidance and comment. Those of us familiar with

the mesa, middle, noise and chaos of the surroundings of many tropical cities are often depressed by the scale and intensity of the problems, and we should, therefore, appreciate the emphasis that the author has deliberately placed on positive rather than negative features and on the attitudes of hope and achievement shown by many shanty-town dwellers. Urban development should undoubtedly be given a much higher priority by Third World governments, for these are not problems that will go away. Unless they seem bound to grow, irrespective of whether city growth is officially encouraged or efforts are directed towards rural development and the reduction of the flow of migrants into the urban areas.

If the shanty towns of the Third World are to remain the "slums of hope", then solutions have to be found not within the towns themselves but in the larger society of the countries concerned. They will moreover depend on their relationships with the industrialized nations of the rest of the world. Discussion of such solutions lies far beyond the scope of this book. All that Professor Lloyd claims to have done, and with considerable justification, is to help us towards an assessment of the processes at work within the shanty town, both as we see them and as they are perceived by the residents themselves.

Robert W. Steel



EDUCATIONAL COMPUTING is the new magazine for everybody who has ever wondered what the microcomputer revolution has meant to education. Here's your chance to find out everything about the use — and study — of computers and their peripherals in schools, colleges and universities.

Computer services have an obvious part to play in the educational process itself. As well as providing important opportunities for your students to learn many skills which could be vital to their futures, you will benefit personally by greater familiarity with the one subject that's undeniably changing everyone's life.

This unique magazine will offer penetrating investigations into the educational applications and implications of data processing systems; full details of available

courses, examinations, and career options; and an authoritative range of reviews — of equipment, software, programs, and books currently on the market. And our "Beginners' Guide" really does start right at the beginning, with advice on raising the finance for your hardware, and how to be sure you're choosing the right system for your needs.

Teachers and students alike will want to use EDUCATIONAL COMPUTING to keep them abreast of the latest technological developments. As one of the ECC family of top computer publications, you'd be right to expect a knowledgeable — and entirely unpartisan — editorial approach. This is a complex and challenging new field, where there is always something new to learn. So don't risk being left behind. Send the coupon today.

Please enter my subscription for ten issues at the annual rate of £5.1. I enclose a cheque/PO. T.H.E.S. Please charge my credit card (delete as applicable).

Name _____ Title _____
School/College/University _____
Address _____

Signature _____
Type of card _____ No. _____
Send to: EDUCATIONAL COMPUTING, ECC Publications Ltd., 30/31 Islington Green, London N1 8BJ.

Wolsey Hall
 Accepted CACC Member ABCC Founded 1894

Classified Advertisements Index

Appointments vacant
Universities
Fellowships & Studentships
Polytechnics
Technical Colleges
Colleges and Institutes of Technology
Colleges of Education
Colleges of Further Education

Colleges and Institutes of Higher Education
Colleges and Departments of Art
Research Posts
Administration Overseas
Adult Education
Librarians
General Vacancies

Official Appointments
Appointments wanted
Other classifications
Awards
Announcements
Exhibitions
Personal Courses
Holidays and Accommodation

Universities

THE OPEN UNIVERSITY

Summer School Tutorial Staff

Appointments for one or two weeks are available at the Open University's summer schools held at universities throughout Great Britain between 5 July and 8 September.

Tutor Posts in the Faculties of Arts, Mathematics and Science. There will be a number of TUTOR posts in the following subject areas: Art, History, Music, Architecture and Design, Drama, History, Literature and Philosophy.

Mathematics courses coded M101, M201, M203 and M283. Biology (all sub-disciplines including Genetics), Chemistry (organic, inorganic and physical), Earth Sciences and Physics.

Tutor Posts in the Faculty of Technology.

Tutors qualified in Elementary Mathematics and Modelling (for technologists) (T101-111). Materials Science (T121-122). Planning, Impulse, or technical systems including project work in groups, and Engineering Mechanics (solids) (T232).

T283 - Introductory Electronics, and T291 - Instrumentation. Tutors qualified in electronics and/or instrumentation; previous teaching experience an advantage.

TAD292 - Art and Environment.

Tutors to facilitate creative projects in design and movement, theatre and performance arts; New Dance; sound; still photography; video/film; community painting; environmental mapping and perception; sculpture; poetry and creative writing; participation in the future food environment; and community radio.

Tutor Posts in the Faculty of Social Sciences.

D101 - Making Sense of Society. Tutors qualified in one or more of: economics, geography/town planning, politics/international relations, psychology, sociology; to teach in one of the three interdisciplinary modules: housing, crime and society, a political simulation exercise on the 80s/90s crisis 1908-8.

D261 - An Introduction to Psychology, and D303 - Cognitive Psychology. Tutors qualified in experimental psychology; for D303, computer experience desirable.

D204 - Fundamentals of Human Geography.

Tutors qualified to teach modern geography, especially with reference to urban planning, rural social geography and statistical techniques.

Demonstrator Posts

Applications for posts as DEMONSTRATOR are invited from graduates in Science to work in the areas of Biology, Chemistry, Physics and Earth Sciences from graduates in Science and Engineering to work in the areas of Aeronautics, Measurement, Electronics, Materials Science, Systems, Structures, Energy Conversion, Metallurgy, Design, Production Systems, Environmental Science and Computing; also from graduates in Psychology.

Application Procedure

For further particulars and on application form send a postcard to the Tutors Office (SS 2), PO Box 22, Milton Keynes, MK7 8AU. Completed application forms must reach the Open University by Monday 4 February 1980.



THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

university college of swansea

Tutor in the Department of Extra-Mural Studies

Applications are invited for the post of full-time Tutor in the Department of Extra-Mural Studies. Candidates should possess a degree in Philosophy and should have a special interest in pursuing philosophical questions with adults.

The appointment, which will be for the earliest possible date, will be on the scale £4,333-£8,992 per annum, together with USS/USDPs benefits.

Further particulars and application forms (2 copies) may be obtained from the Personnel Officer, University College of Swansea, Singleton Park, Swansea, SA2 8PE, to whom they should be returned by Friday, 15 February, 1980.

UNIVERSITY COLLEGE DUBLIN

Department of Library and Information Science. Applications are invited for an academic appointment at the level of Assistant Lecturer in the area of Library Science. The successful applicant will be expected to have an appropriate academic background and experience. The current salary scale is: Assistant Lecturer: £5,000-£7,750 (under review). Entry point on the relevant scale will be in accordance with qualifications and experience. Prior to application, further information (including application procedure) should be obtained from the Secretary and Bursar, University College, Bedford, Dublin 4. Tel: 01-224 63244, ext. 431. The latest date for receipt of completed applications is 15 February, 1980.

THE PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY

DEPARTMENT OF CHEMICAL TECHNOLOGY CHIEF TECHNICAL OFFICER

The department conducts degree courses in Food Technology and Mineral Technology and services courses in Chemistry and Biology. A broad background in laboratory administration, installation, maintenance of instruments and equipment is essential.

SALARY: Level 6 - K13780 p.a. plus 24% gratuity.

Appointee must be a full-time member and family settlement allowances paid. The rate of 24% gratuity is based on the rate of 24% per year. Education, leave and medical benefits are provided. For information and conditions of service visit the department. The Registrar, University of Papua New Guinea, P.O. Box 743, Lae, Papua New Guinea. Applications close on 31st January, 1980.

UNIVERSITY COLLEGE DUBLIN

Department of Computer Science

Applications are invited for a full-time appointment in the Department of Computer Science. The appointment will be made at the level of either Assistant Lecturer or College Lecturer. Details must be completed and sent to the Department of Computer Science, University College, Dublin 4. Closing date: 15 February, 1980.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Applications are invited for a tenured lectureship from persons with a professional and research background in the field of Crop Agronomy. Applicants will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

THE UNIVERSITY OF NEW ENGLAND

Australia

LECTURER IN CROP AGRONOMY

Universities continued

UNIVERSITY COLLEGE DUBLIN

Applications are invited by the Governing Body of the College for the following full-time appointments which will become vacant in Autumn, 1980: —

PROFESSORSHIP OF GREEK

Prior to application, further information (including application procedure) should be obtained from the Secretary and Bursar, University College, Bedford, Dublin 4; telephone enquiries: 693244, extension 431. The latest date for receipt of completed applications is Thursday, February 28, 1980.

UNIVERSITY COLLEGE, CALWAY, IRELAND

LECTURESHIP/JUNIOR LECTURESHIP IN HISTORY

Applications are invited for the above post. Salary scales: Lectureship: £8,530 x (eight) £11,271 Junior Lectureship: £5,709 x (10) £7,892. Applications will be particularly welcome from candidates with special interests in either Early Medieval History or Modern Economic History. Closing date for receipt of applications 4 FEBRUARY, 1980. Further information may be obtained from the Registrar.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

DUNDEE THE UNIVERSITY

DEPARTMENT OF PHYSIOLOGY

Applications are invited for a Lectureship in Physiology. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

LONDON

THE UNIVERSITY OF LONDON

DEPARTMENT OF MUSIC

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific principles are applied to developments in Australian crop production. In addition to teaching, the successful applicant will be expected to develop a postgraduate research programme in a relevant area of crop agronomy. The Department has facilities for and research interests in the areas of systems agronomy, crop adaptation, crop water relations, weed biology, plant nutrition and horticulture. Further information can be obtained from Dr. J. V. Lovell, Head of the Department of Agronomy and Soil Science in the University. The appointment will be available from 1 March 1980, and may have a non-tenured period. Salary range: \$16,291-\$21,401 per annum. Closing date: 31 January, 1980. Position No.: 47.

Applications are invited for a Lectureship in Music. The successful applicant will be expected to have a Ph.D. and subsequent experience relevant to the position. The successful applicant will be expected to teach courses in which basic scientific

internship in public policy analysis would be expected. Candidates should have a minimum of 18 research experience (internships and/or research) and be able to teach to a honours degree level.

Salary: \$6,597 to \$7,701 per annum plus 27% superannuation. 12 months full time.

For further details and application form, telephable to 08 947 1000 or 08 947 1001, please contact: Mr. Peter C. Jones, Personnel Officer, New South Wales Government, 100 Macquarie Street, Sydney, New South Wales 2000.

Nearly 10.15 am. Books and fill at the ready in the eternally empty Stapler full. Pencils sharp and sharpened. Now for the final touch: his own personal acknowledgment of the silicon chip decade. "I've liked this decade," he says, "I've liked it because, whether you're a concerned debtor as his office does, opened with automatic precision, pleases his voice, announces, 'Second decade is your turn' and ready, and a bank of speakers steadily humming round to illuminate his welcoming face."

Yours faithfully,
IAN CLEMENTS
Flat J/K, The Hawthth
Keston, Kent ME18 7JY
01474 811111

the demand in the 1960's we were facing ourselves but for others, the college and university students in the United States and so is likely to be the case. On the other hand, persons who are almost not likely to be coming away from higher education in the United States, I think, especially not for their own sake.

The inevitable conclusion is that the United States is not going to be able to provide education free of charge for all persons who want it. Educating a higher proportion of our population to a level that will make them self-sufficient, so, in perhaps the most important, and the most neglected, form of investment in human resources.

Britain provides a good example of a country in which a high proportion of its young people, that almost every young developed country, in these circumstances further association with higher education is a matter of course, not of choice. Of course, if Mr. Carlsile had argued

world—may be manufacturing and technology. The European countries, especially Germany, France, and Japan, will be the centre of the world's high technology. The United States will be the centre of the world's high technology. The United States will be the centre of the world's high technology.

Also, the Presidential Commission on Foreign Languages and National Studies went beyond its and vigorous recommendations to principles and actually recommended a comprehensive and timely bold action program concerning asking of specific questions and seeking for realistic million in annual new expenditures. Most of what is recommended makes good sense, and deserves short summary and

certainly will—in large part—never be funded.

No doubt well aware of this, the Commission suggests that it be succeeded by a successor standing National Commission designed to push toward its objectives over the long term. This particular suggestion is so appealing as the least costly immediate palliative that it may well be acted upon, and some will soon be able to predict its results.

In the meantime, the scandalous status quo prompts two reflections. One is that American attitudes toward foreign languages involve complexity beyond the classroom. On the one hand, the Commission's estimate of Americana speak a second language although they have never studied it—at least not within American education—because they were either born to it abroad or learned it at home or of a family that still maintains ties in its pre-American origins. On the other hand, hearing American has been at the heart of the drive to assimilate the immigrant and to demand evolution of a nation of immigrants.

There is a profound link between the integrating function of the national language and the American tendency to resist familiarity with foreign languages. The language of the American past was seldom of varied achievement, and for more often a stigma of recent immigration. It will demand a persistent assault on the American consciousness to kindle the greater receptivity to the languages of other nations. The Commission's well-documented case that ignorance of the root of the world may be injurious to America's national health can be a useful component of such an assault.

There is one more reason, and so much of the foreign language instruction that is being offered in the schools and universities of the United States is in fact so bad that it is literally worse than nothing. The greater assault on the language derives from the commonly observed fact that students who have had two or more years of foreign language courses tend to be unable thereafter either to read or speak the language.

What they have experienced is worse than nothing because boredom with grammar and frustration with respect to comprehension has destroyed even the appetite to learn, and enshrouded the already painful instruction in meaningless instruction as pointless torture. The sad truth is that—in general—the American educational system continues willfully to ignore almost everything that is already available about the teaching of foreign languages.

Successful experience—even in the United States—indicates, for example, that relatively young students are most easily receptive to foreign languages and that the total immersion in the language for a brief but highly intensive period works well to create rapidly a level of competence that makes the language usable, so that its further use is not frustrating, but rather than frustration; that native speakers are a vital asset in learning the spoken language, although in their absence persistence by native speakers can serve as a substitute; that the continued use of a foreign language must be maintained for an extended period.

Why then is it that most of the foreign language instruction in American schools is so dismal, for all that it might amount to one hour a day at best, usually not by native speakers and without the use of recordings, and that when the course is over no mechanism exists to maintain foreign language use? The answer, of course, is that by and large in American education foreign language instruction has been an afterthought to be tolerated, and even to be tolerated more often as an irrelevant nuisance. And where there is no will, there is no way.

Proficiency testing is now coming into vogue in American education, and it is not surprising that students have not only endured schooling but have in fact also achieved at least minimum levels of learning in the process. The Educational Testing Service has already recommended proficiency testing in foreign languages. If that were adopted, and if instruction in foreign languages were restructured so as to produce total competence, then a vital step would be taken toward rescuing the United States and the rest of the world from the crippling effects of American international illiteracy. The monolingual isolationism now fostered by the educational system is shattered and shattering, but before foreign language instruction becomes more widespread it must—at least and at last—be done well.